



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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May 1, 2023

Ref: 8ORA-N

Lt. Colonel Alysia Harvey
U.S. Air Force
Ground Based Strategic Deterrent FEIS
2261 Hughes Avenue, Suite 155
JBSA Lackland, Texas 78236-9853

Dear Ms. Harvey:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Air Force (USAF) Final Environmental Impact Statement (FEIS) for the Ground Based Strategic Deterrent (GBSD) Deployment and Minuteman III Decommissioning and Disposal (CEQ No. 20230043). We are providing these comments in accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and pursuant to Section 309 of the Clean Air Act (CAA).

The USAF has prepared the FEIS to analyze the potential effects on the human and natural environments from the deployment of the GBSD intercontinental ballistic missile (ICBM) system and the decommissioning and disposal of the Minuteman III (MMIII) ICBM system. These activities would occur at F.E. Warren Air Force Base (AFB), WY; Malmstrom AFB, MT; Minot AFB, ND; Hill AFB, UT; Utah Test and Training Range (UTTR), UT; Camp Guernsey, WY; and Camp Navajo, AZ. In addition, all MMIII-related facilities, infrastructure, and technologies would be modernized or replaced as necessary to support the GBSD weapon system.

On August 15, 2022, the EPA provided comments on the Draft EIS raising concerns and making recommendations on clarifying wastewater requirements under current National Pollutant Discharge Elimination System (NPDES) permits, existing air quality and potential air quality impacts, and considerations for meeting General Conformity requirements. We also commented on impacts from on-base wastewater infrastructure, workforce hubs, drinking water wells, wastewater discharges, sewage lagoon upgrades and open burn safer alternatives.

Aside from outstanding concerns about the air quality analysis, the EPA finds the FEIS largely responsive to the concerns and recommendation that we provided on the Draft EIS. We appreciate the opportunity to comment on the FEIS. If you have any questions or comments,

please contact me at (303) 312-6155, or Jody Ostendorf of my staff at (303) 312-7814 or ostendorf.jody@epa.gov.

Sincerely,

Melissa W. McCoy, Ph.D., J.D.
Manager, NEPA Branch
Office of the Regional Administrator

**Ground Based Strategic Deterrent (GBSD) Deployment and
Minuteman III Decommissioning and Disposal
EPA's Final EIS Comments**

Air Quality

We appreciate the response to our comments provided in the FEIS. The responses indicate that changes have been made to address our comments. In particular, the FEIS now presents emissions for the construction and conversion of each facility individually (see Table 3.1-4, page 3-11). We find this information valuable to better understand what the emissions would be for construction and conversion of the entire Missile Wing (MW) at each Air Force base (AFB). The information is also relevant to the analysis for General Conformity. For example, using the information in Table 3.1-4 the conversion of all the 15 Missile Alert Facilities (MAFs) and 150 Launch Facilities (LFs) for each MW would result in 283.5 tons of NO_x. Alternatively, if construction of two MAFs and 30 LFs were conducted during a year, the resulting NO_x emissions would be 53.8 tons per year (tpy) based on the Air Force's assumptions. However, it is not clear how the emissions for off-base construction have been included in emissions totals for each AFB. Page 3-8 indicates that:

“The Air Force used its Air Conformity Applicability Model (ACAM) to estimate emissions that could potentially result from the Proposed Action throughout the region (Table 3.1-3). These **estimates include on- and off-base** construction, additional personnel, heating proposed buildings, and operation of backup generators. As a reasonable upper bound, the Air Force assumed that all on-base construction activities would be compressed into a single 12-month period and combined with the total emissions for all activities throughout the missile field in the peak construction year. **During the peak year, it was assumed there would be three MAFs, 36 LFs, five communication towers, three laydown areas, and one workforce hub constructed simultaneously in any attainment area.**” (Emphasis added).

Using these assumptions and the emissions per activity listed in Table 3.1-4, the resulting NO_x emissions for three MAFs, 36 LFs, five communication towers, three laydown areas and one workforce hub is 75.4 tpy NO_x. In contrast, Table 3.1-3, which is stated to be inclusive of “on- and off-base” activities, presents F.E. Warren NO_x emissions of 6.6 tpy. The Draft EIS (DEIS) estimate for this same base was 23.9 tpy NO_x. It is unclear why the emissions estimates have been reduced and how these estimates for F.E. Warren, Malmstrom, and Minot AFBs could be inclusive of the off-base construction activities. Therefore, we have the following recommendation to simplify the information provided in order for the reader and decision maker to understand the level of emissions associated with the action.

- Present emissions to complete *all* construction at each MW (e.g., conversion of 15 MAFs and 150 LFs at each MW as well as the other activities associated with the action such as construction of communication towers, vehicle emissions, etc.)

- Based on the timeline for completion of these actions (e.g., five years), divide total emissions by the duration of the project to derive tpy emissions for the MW construction activities.

As an example, we have used the emissions per activity in Table 3.1-4 for the construction/conversion of 15 MAFs and 150 LFs and assumed a five-year schedule for completion of these activities. The resulting NO_x emissions to convert the MAFs and LFs at each MW is 56.7 tpy (not including other construction such as utility installation, communication towers, laydown areas, and workforce hubs). Based on this information we recommend updating Tables 3.1-3, 3.1-7, and 3.1-9 for F.E. Warren, Malmstrom, and Minot AFBs, respectively. We note that current on- and off-base emissions presented in these three tables are 6.6, 5.6, and 5.6 tpy NO_x, respectively. This is significantly less than the estimates we have generated based on the information in Table 3.1-4 for individual activities, as well as significantly less than the emissions presented for the General Conformity applicability analysis presented in Table 3.1-4 (22.8 tpy NO_x in the Denver Severe ozone nonattainment area; 58.1 tpy in the Denver Marginal ozone nonattainment area). In addition, we continue to recommend that the major source threshold in 40 C.F.R. § 52.21 (250 tpy) not be used to judge significance and we also note that the significant net emission increase for NO_x is 40 tpy (see 40 C.F.R. § 52.21(b)(23)(i) – definition of “significant” in the context of the PSD permitting program).

We also wish to make the Air Force aware that since the issuance of the draft, the Denver Metro North Front Range (DMNFR) ozone nonattainment area has again been reclassified from Serious to Severe, effective November 7, 2022 (see 40 C.F.R. § 81.306 for the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS); see also Federal Register Vol. 87, No. 196, page 60926 published October 7, 2022). This change further reduces the General Conformity *de minimis* thresholds for ozone precursors from 50 tpy to 25 tpy.

On-Base Wastewater Infrastructure

In our comments on the DEIS, the EPA recommended that the Air Force notify municipalities of increased wastewater generation because changes to the volume or quality of base discharges might exceed the normal operating conditions at receiving Publicly Owned Treatment Works (POTWs). We also noted that increased utility use and wastewater disposal will occur because of workforce hubs, and we recommended that the Air Force notify receiving POTW operators. We appreciate the addition of a mitigation measure in Section 6.0 of the FEIS that addresses those concerns. The measure involves the Air Force notifying municipalities that own and operate POTWs of the anticipated wastewater discharge from on-base operations to ensure the POTWs are aware of changes in discharges that may impact their POTW or wastewater collection system.

Workforce Hubs

The EPA recommended providing treatment specifications information to the regulating authority/permitting authority for workforce hubs that would have a designated package plant or other sanitary sewage treatment unit. We also recommended notifying the area National

Pollutant Discharge Elimination System (NPDES) Permitting authority in advance of location selection to avoid impaired streams, low-flow streams, and streams with total maximum daily load (TMDL) limitations. We appreciate the addition of a mitigation measure to Section 6.0 of the FEIS that addresses those concerns.

Drinking Water Wells

The EPA recommended that the FEIS include information on sampling requirements, treatment, and disposal of contaminated water associated with drilling drinking water wells, and a discussion of state groundwater regulations. EPA notes these topics were addressed by the addition of information on groundwater regulations and permitting to the Water Resources Environmental Consequences section of the FEIS in Sections 3.15.2.2 and 3.15.3.2. We also appreciate the addition of mitigation measure WATER – 13, added to Section 6.0, that states “any new wells developed as part of the Project, if needed, will also be registered with the applicable state’s DNR office.”

Wastewater Discharges

The EPA recommended consulting with wastewater operators and the North Dakota Department of Environmental Quality before releasing project-related discharges to the Minot AFB wastewater treatment facility lagoons and that notice of any planned substantial changes to sewage sludge facilities and sludge management practices be provided to the implementing authority. EPA supports the addition of a mitigation measure to Section 6.0 of the FEIS which addresses those concerns, including ensuring there are no adverse impacts to the permitted receiving stream.

The EPA stated that the EIS is unclear about whether additional discharges from Launch Facilities (LFs) cleaning will be necessary and recommended including information on the permitted discharges for all missile areas. The following text was added to Section 3.13.1.2.2 of the FEIS: “Construction at the LFs is not expected to result in wastewater discharges. However, ground disturbance at each site would be greater than one acre, so an NPDES stormwater discharge permit would be required for each site.” This additional information helps in understanding potential impacts.

Sewage Lagoon Upgrades

The EPA recommended that the FEIS include additional information on plans for upgrading the sewage lagoons at each MAF. The FEIS includes updated language in Section 3.13.1.1.2 explaining that the lagoons are non-discharging, maintained regularly, and pumped out as needed, so no upgrades are needed. The FEIS also includes a mitigation measure, UTILITIES – 14, which states that any planned substantial changes to the existing sewage sludge facilities, the manner of their operations, or to current sewage sludge management practices of storage or disposal requires the Air Force to give notice to the implementing authority. The EPA notes the addition of text to Section 3.13.1.2.2 regarding sludge biosolids permitting and construction at LFs which is not expected to have wastewater discharges. The FEIS also added that for MAF sites that would be reconstructed, existing wastewater treatment systems to be reused would be

inspected, cleaned, and kept consistent with current permit standards and any required new permits. The Environmental Consequences sections for Malmstrom and Minot AFBs were updated to note that construction impacts would be similar to those for F.E. Warren AFB. Text was added to Section 3.13.2.1.2 for Malmstrom AFB off-base utilities and infrastructure, that “the lagoons are non-discharging, so no NPDES permit is required.” For the Minot AFB off-base utilities and infrastructure, the FEIS states that “the lagoons are permitted and must comply with NPDES permit requirements.” This additional information provides a better understanding of the potential impacts.

Open Burn Safer Alternatives

In our comment letter on the DEIS, the EPA recommended that the FEIS include discussion of alternative technologies for open burning/open detonation (OB/OD). The EPA notes that Section 3.1.4.2.2 of the FEIS, which discusses decommissioning of solid fuel, has been updated to include information on the current process for open burning of solid fuel, the potential for alternative treatment such as washout, and the alternative technology assessment that occurs annually in accordance with current permit requirements. This additional information helps clarify the potential impacts of the decommissioning of solid fuel.